

AMENDMENT TO THE CLAIMS

1. (Currently Amended) A method of manufacturing an electron-emitting source, comprising the steps of:
forming a film containing curled and entangled nanotube fibers on a substrate, each of the curled and entangled nanotube fibers having ~~at least two ends~~one end connecting to the substrate;
and
irradiating the film formed on the substrate with a laser beam perpendicularly to the substrate, wherein the step of irradiating includes the step of creating a plurality of curled and entangled nanotube fibers on the substrate from at least one of the curled and entangled nanotube fibers by the laser beam, each of the plurality of curled and entangled nanotube fibers having a free end serving as an emission site.
2. (Original) A method according to claim 1, wherein the step of forming includes the step of forming a film of the nanotube fibers made of carbon.
3. (Original) A method according to claim 1, wherein the step of forming includes the step of forming the film in accordance with any one scheme selected from electrodeposition, thermal CVD, and spraying.
4. (Original) A method according to claim 1, wherein the step of forming includes the step of forming the film on the substrate made of iron or an iron-containing alloy.
5. (Original) A method according to claim 1, wherein the step of irradiating includes the step of irradiating with the laser at an energy density of 5 mJ/cm² to 500 mJ/cm².
6. (Original) A method according to claim 1, wherein the step of irradiating includes the step of irradiating the film with an excimer laser as the laser.

7. (Original) A method according to claim 1, wherein the step of irradiating includes the step of irradiating the film with the laser in any one atmosphere selected from air, gas, and vacuum.

8. (New) A method of manufacturing an electron-emitting source, comprising the steps of:

forming a film containing entangled nanotube fibers on a substrate; and
irradiating the film on the substrate with a laser beam perpendicularly to the substrate, wherein the step of irradiating increases the number of the entangled nanotube fibers having a free end and reduces a peak current density emitted by the entangled nanotube fibers, the peak current density measured at measurement points located at a predetermined interval in both X and Y directions of the substrate.